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| 10/516,436 | 10/26/2005 | Anthony Asbury | 615-104 | 2995 |

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| EXAMINER | |
|---|---|
| HERRING, BRENT W | |

| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/516,436 | ASBURY, ANTHONY | |
| | Examiner | Art Unit | |
| | BRENT W. HERRING | 3633 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *02 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *37-47 and 49-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-47 and 49-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Objections*

1. Claim 61 is objected to because of the following informalities: claim 61 recites the limitation "the cylinders" in the body of the claim. There is insufficient antecedent basis for this limitation in the claim.

.Appropriate correction is required.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 102*

3. Claims 37, 41-42, 45, 50, 52, 56, 57, 64, 67, 70-72 rejected under 35 U.S.C. 102(b) as being anticipated by Konig, US 3,675,954.

Regarding claim 70:

'954 discloses a panel joint, comprising:

a panel (5, see Fig. 4) having an inner surface, an outer surface, at least one end and a fastener-receiving cavity (see Fig. 7) formed within said panel which opens onto said inner surface, generally adjacent to said one end of said panel;

a panel joining member (9, 10) having opposed, spaced-apart inner and outer sidewalls which define therebetween a panel-receiving cavity for receipt therein of said one end of said panel, said inner sidewall (9) of said panel joining

member having an aperture formed therethrough which is positioned to align with said fastener-receiving cavity when said one end of said panel is received with said panel-receiving cavity;

at least one stop member (note the shape of the joining) formed on said panel joining member adjacent to said panel-receiving cavity against which said one end of said panel abuts when fully inserted into said panel-receiving cavity; and

a fastener (11) removably insertable through said aperture of said inner sidewall of said panel joining member and into said fastener-receiving cavity capable of enabling said fastener to engage said panel and urge the outer surface of said panel against the outer sidewall of said panel joining member.

Regarding claim 71:

'954 discloses a method of connecting a panel joining member employing a panel assembly of the type comprising, a panel having an inner surface, an outer

surface, and at least one end, a panel joining member having opposed, spaced-apart

inner and outer sidewalls (9, 10) which define therebetween a panel-receiving cavity, said inner sidewall (9) of said panel joining member having an aperture formed therethrough, at least one stop member formed on said panel joining member adjacent to said panel-receiving cavity, and a fastener, the method comprising the steps of:

forming a fastener-receiving cavity within said panel which opens onto said inner surface, generally adjacent to said one end of said panel (see Fig. 7);

inserting said one end of said panel into said panel-receiving cavity of said panel joining member;

abutting said one end of said panel against said one stop member and aligning said fastener-receiving cavity of said panel with said aperture of said inner sidewall of said panel joining member; and

inserting said fastener (11) through said aperture of said inner sidewall of said panel joining member and into said fastener-receiving cavity of said panel to enable said fastener to engage said panel and urge the outer surface of said panel against the outer sidewall of said panel joining member.

Regarding claim 72:

'954 discloses a panel joining assembly, comprising:

a panel joining member having at least one pair of opposed, spaced-apart inner and outer sidewalls which define therebetween a panel-receiving cavity for receipt therein of a panel having a fastener-receiving cavity formed therein, said inner sidewall of said panel joining member having an aperture formed therethrough, and at least one stop member formed on at least one of said sidewalls of said panel joining member, adjacent to said panel-receiving cavity against which a panel abuts when fully inserted into said panel-receiving cavity; and

at least one fastener assembly comprising a fastener and a receiver, said receiver disposed within said fastener-receiving cavity and said fastener removably insertable through said aperture of said inner sidewall of said panel joining member and into said receiver in said fastener-receiving cavity of a panel to urge said receiver to engage said panel and, in turn, urge said panel against the outer sidewall of said panel joining member.

Regarding claim 37:

'954 discloses claim 71, comprising the further step of: inserting a receiver (12) into said fastener-receiving cavity prior to the panel being inserted within the panel joining member.

Regarding claim 41:

'954 discloses claim 71, wherein the fastener has a screw-thread (col. 2, lns. 15-21) to engage at least one of said panel and said panel joining member.

Regarding claim 42:

'954 discloses claim 37, wherein the receiver is an adapter, the adapter having a shape complementary to that of the fastener-receiving cavity (see Fig. 7).

Regarding claim 45:

'954 discloses claim 71, wherein the panel includes at least one projection (6) to engage a corresponding recess in a panel joining member thereby forming a push-fit type joint.

Regarding claim 50:

'954 discloses claim 72, wherein the receiver of the fastener assembly is secured within a panel along a selected panel end for inserting into a panel-receiving cavity (see Fig. 7).

Regarding claim 52:

'954 discloses claim 72, wherein the receiver comprises a body adapted for engagement with a panel, the body including an open mouthed recess capable of receiving a fastener.

Regarding claim 56:

'954 discloses claim 72, wherein the panel joining member includes a chamfered edge (see Fig. 7, note that the edges are chamfered with an inward slope).

Regarding claim 57:

'954 discloses claim 72, wherein the fastener is a screw having a flat ended shank (see Fig. 7).

Regarding claim 64:

'954 discloses claim 70, further comprising: an adapter (12) having an open end located in said fastener-receiving cavity, the adapter having a shape complimentary to that of said fastener-receiving cavity.

Regarding claim 67:

'954 discloses claim 70, wherein said fastener includes a screw thread to engage the panel joining member (col. 2, lns. 8-21).

4. Claims 70-71 are rejected under 35 U.S.C. 102(b) as being anticipated by Richards, US 3,885,765.

Regarding claim 70:

'765 discloses a panel joint, comprising:

a panel (17) having an inner surface, an outer surface, at least one end and a fastener-receiving cavity formed within said panel which opens onto said inner surface,

generally adjacent to said one end of said panel;

a panel joining member (10) having opposed, spaced-apart inner and outer sidewalls (13-16) which define therebetween a panel-receiving cavity (11-12) for receipt therein of said one end of said panel, said inner sidewall of said panel joining member having an aperture (19) formed therethrough which is positioned to align with said fastener-receiving cavity (18) when said one end of said panel is received with said panel-receiving cavity;

at least one stop member (at the base of the cavity) formed on said panel joining member adjacent to said panel-receiving cavity against which said one end of said panel abuts when fully inserted into said panel-receiving cavity; and

a fastener (20) removably insertable through said aperture of said inner sidewall of said panel joining member and into said fastener-receiving cavity to enable said fastener to engage said panel and urge the outer surface of said panel against the outer sidewall of said panel joining member.

Regarding claim 71:

'765 discloses a method of connecting a panel joining member employing a panel assembly of the type comprising, a panel (17) having an inner surface, an outer

surface, and at least one end, a panel joining member (10) having opposed, spaced-apart inner and outer sidewalls which define therebetween a panel-receiving cavity (11-12), said inner sidewall of said panel joining member having an aperture formed therethrough, at least one stop member (at the base of the cavity) formed on said panel joining member adjacent to said panel-receiving cavity, and a fastener (20), the method comprising the steps of:

forming a fastener-receiving cavity within said panel which opens onto said inner surface, generally adjacent to said one end of said panel;

inserting said one end of said panel into said panel-receiving cavity of said panel joining member; abutting said one end of said panel against said one stop member and aligning said fastener-receiving cavity of said panel with said aperture of said inner sidewall of said panel joining member (see Fig. 2); and

inserting said fastener through said aperture of said inner sidewall of said panel joining member and into said fastener-receiving cavity of said panel to enable said fastener to engage said panel and urge the outer surface of said panel against the outer sidewall of said panel joining member.

***Claim Rejections - 35 USC § 103***

5. Claims 37, 43, 49, 51-53, 58-61, 64, 66 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Neuschotz, US 3,451,181.

Regarding claim 37:

'765 discloses claim 71, but does not expressly disclose the step of: inserting a receiver into said fastener-receiving cavity prior to the panel being inserted with the panel joining member.

'181 discloses inserting a receiver (14) into a fastener-receiving cavity.

'181 and '765 are analogous art because they are from the same field of panels configured to receive threaded inserts.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the receive inserting method of '181 with a panel of '765.

The motivation to insert a receiver would have been to assure transmission of load forces in an effective manner between a fastener and a panel to preserve the strength of the connection.

Regarding claim 58:

'765 discloses claim 70, but does not disclose the claimed structure of claim 58.

'181 discloses a panel comprising: an adapter (14) to receive a fastener and for insertion into a fastener-receiving cavity, the adapter comprising an

opening (30) having an open end having a mouth and a closed end, capable of use to receive the fastener, the mouth of the opening having a diameter greater than that of the fastener (see Fig. 1).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the adaptor of '181 in the panel of '765.

The motivation to insert a receiver would have been to assure transmission of load forces in an effective manner between a fastener and a panel to preserve the strength of the connection.

Regarding claim 59:

'181 further discloses wherein the opening includes a narrowing at its closed end capable of use to grip the end of a fastener (see Fig. 1).

Regarding claim 60:

'181 further discloses wherein the opening and the narrowing are cylindrical (see Fig. 3).

Regarding claim 61:

'181 further discloses wherein the cylinders are co-axial.

Regarding claim 43:

'765 discloses claim 71 wherein the fastener-receiving cavity has an open end, but does not expressly disclose wherein the cavity narrows away from its open end.

'181 discloses a method wherein a fastener-receiving cavity in a panel narrows away from its open end (see Fig. 1).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the narrowing cavity of '181 for the connector of '765.

The motivation to combine would have been to ease the entry of the panel in the connector.

Regarding claim 72:

'765 discloses a panel joining assembly, comprising: a panel joining member (10) having at least one pair of opposed, spaced-apart inner and outer sidewalls (13-16) which define therebetween a panel-receiving cavity for receipt therein of a panel having a fastener-receiving cavity (11-12) formed therein, said inner sidewall of said panel joining member having an aperture (19) formed therethrough, and at least one stop member (at the base of the cavity) formed on at least one of said sidewalls (note that the stop extends inwardly from the outer wall) of said panel joining member, adjacent to said panel-receiving cavity against which a panel abuts when fully inserted into said panel-receiving cavity; and at least one fastener assembly comprising a fastener (20) and said fastener removably capable of being inserted through said aperture of said inner sidewall of said panel joining member and into a receiver in said fastener-receiving cavity of a panel to urge said receiver to engage said panel and, in turn, urge said panel against the outer sidewall of said panel joining member.

'765 does not expressly disclose wherein the assembly includes a receiver (18), said receiver disposed within said fastener-receiving cavity.

'181 discloses a receiver disposed within a fastener-receiving cavity.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to insert a receiver within a fastener-receiving cavity.

The motivation to insert a receiver would have been to assure transmission of load forces in an effective manner between a fastener and a panel to preserve the strength of the connection.

Regarding claim 49:

'765 in view of '181 discloses claim 72, and '765 further discloses wherein two panel-receiving cavities subtend an angle of less than 180° and the fastener aperture is located in the internal wall of the panel joining member (see Fig. 2).

Regarding claim 51:

'765 in view of '181 discloses claim 49, and '181 further discloses wherein the receiver of the fastener assembly is secured within a panel along a selected panel end capable of use for insertion into a panel-receiving cavity.

Regarding claim 52:

'765 in view of '181 discloses claim 72, and '181 further discloses wherein the receiver comprises a body adapted for engagement with a panel, the body include an open mouth recess for receiving a fastener.

Regarding claim 53:

'765 in view of '181 discloses claim 52, and '181 discloses wherein the receiver narrows away from the open mouth (see Fig. 1).

The motivation to have the receiver narrow away from the open mouth would have been to ease the entry of a fastener therein and provide for a reasonable error tolerance in alignment of the fastener.

Regarding claim 64:

'765 discloses claim 70, but does not expressly disclose wherein an adapter having an open end is located in the fastener-receiving cavity having a shape complimentary to the fastener-receiving cavity.

'181 discloses an adapter (17, see Figs. 1, 2) in the cavity having a shape complimentary thereto.

'181 and '765 are analogous art because they are from the same field of joining members between adjacent panels.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the adapter of '181 with the joint of '765.

The motivation to combine would have been to provide for a firmer connection with a fastener in the panel.

Regarding claim 66:

'765 in view of '181 discloses claim 64, and '181 further discloses wherein the adapter narrows away from its open end capable of ensuring that the material from which the adapter is formed undergoes plastic flow around the fastening member as the fastening member is fully engaged.

6. Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Neuschotz, US 3,451,181 as applied to claim 72 above, and further in view of Hudock, USP 3,866,373.

Regarding claims 54 and 55:

'765 in view of '181 discloses claim 72, but does not expressly disclose wherein opposing walls of the panel joining member are inclined together at an angle of up to 5 degrees and wherein the angles is between 0.7 and 2 degrees.

'373 discloses a panel channel wherein the walls are inclined together.

'765 and '373 are analogous art because they are from the same field of engaging panels in a channel.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the inclined walls of '373 for the channels of '646.

The motivation to combine would have been to provide for a compressive fit.

'373 does not expressly disclose wherein the angle is less than 5 degrees and more specifically between 0.7 and 2 degrees.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to contrive any number of desirable ranges for the inclination angle limitation disclosed by Applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Further, it

has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Refer to MPEP § 2144.05.

7. Claims 38, 39 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Hirath et al., USPA 2002/0100250.

Regarding claims 38 and 39:

'765 discloses claim 37, but does not expressly disclose wherein an adhesive or an adhesive bond weld is introduced between the panel and at least one of the sidewalls of the panel joining member when the fastener has been tightened substantially.

'250 discloses the use of adhesive bonding or welding (para 0007) to secure an outer casing (13) to the sides of a panel joining member (25, see Fig. 3).

'250 and '765 are analogous art because they are from the same field of attaching panels into channels.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use adhesive or adhesive bond welding as taught by '250 for the joint of '765.

The motivation to combine would have been to provide a vacuum seal between the panel and the connecting member.

Regarding claim 63:

'765 discloses claim 62, but does not expressly disclose wherein the joint includes adhesive between the panel and at least one wall of the joining member.

'250 discloses the use of adhesive (para 0007) to secure an outer casing (13) to the sides of a joining member (25, see Fig. 3).

'250 and '765 are analogous art because they are from the same field of attaching panels into channels.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use adhesive as taught by '250 for the joint of '765.

The motivation to combine would have been to provide a vacuum seal between the panel and the connecting member.

8. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Hirath et al., USPA 2002/0100250 as applied to claim 63 above, and further in view of Neuschotz, US 3,451,181.

Regarding claim 65:

'765 in view of '250 discloses claim 70, but does not expressly disclose wherein an adapter having an open end is located in the fastener-receiving cavity having a shape complimentary to the fastener-receiving cavity.

'181 discloses an adapter (17, see Figs. 1, 2) in the cavity having a shape complimentary thereto.

'181 and '765 are analogous art because they are from the same field of joining members between adjacent panels.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the adapter of '181 with the joint of '765.

The motivation to combine would have been to provide for a firmer connection with a fastener in the panel.

9. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765.

Regarding claim 40:

'765 discloses claim 71, but does not expressly disclose wherein the fastener is an expanding rivet fastener to enable engaging the panel tightly.

Examiner takes official notice that it is old and well known to use expanding rivet fasteners to connect disparate articles.

Furthermore, rivets and screws are recognized as equivalent mechanical fasteners as they perform substantially the same function.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have replaced screws in '765 with expanding rivet fasteners as no extraordinary or unexpected results would be accomplished.

The motivation to replace would have been to provide for a tighter connection that can be more quickly attached.

10. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Brainard et al., US 1,813,909.

Regarding claim 43:

'765 discloses claim 71 wherein the fastener-receiving cavity has an open end, but does not expressly disclose wherein the cavity narrows away from its open end.

'909 discloses a method of connecting a panel wherein the recess narrows away from its open end (wall 12 is chamfered inwardly on its outer edge).

'765 and '909 are analogous art because they are from the same field of panel connecting fixtures.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the narrowing recess of '909 for the connector of '646.

The motivation to combine would have been to ease the entry of the panel in the connector.

11. Claims 44 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Luce, USP 2,429,833.

Regarding claims 44 and 69:

'765 discloses claims 37 and 70, but does not expressly disclose introducing the fastener into the receiver at an angle inclined to the axis perpendicular to the surface of the panel.

'765 discloses a fastening means wherein the fastener is introduced into the receiver (2, see Fig. 2) at an angle inclined to the axis perpendicular to the surface of the panel.

'765 and '833 are analogous art because they are from the same field of fastener connected receivers (2) and panels (15).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the panel of '765 to use the angle inclined fastener taught by '833.

The motivation to combine would have been to provide for imperfect fastening angles.

12. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Hudock, USP 3,866,373.

Regarding claims 46 and 47:

'765 discloses claim 36, but does not expressly disclose wherein opposing walls of the panel joining member are inclined together at an angle of up to 5 degrees and wherein the angles is between 0.7 and 2 degrees.

'373 discloses a panel channel wherein the walls are inclined together.

'765 and '373 are analogous art because they are from the same field of engaging panels in a channel.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the inclined walls of '373 for the channels of '646.

The motivation to combine would have been to provide for a compressive fit.

'373 does not expressly disclose wherein the angle is less than 5 degrees and more specifically between 0.7 and 2 degrees.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to contrive any number of desirable ranges for the inclination angle limitation disclosed by Applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Further, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Refer to MPEP § 2144.05.

13. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richards, US 3,885,765 in view of Watanabe, USP 4,372,701.

Regarding claim 68:

'765 discloses claim 70, but does not expressly disclose wherein the fastener-receiving cavity includes an aperture to receive a nut into which the

fastener can be screwed, the panel joining member and the nut co-operatively engaging to lock the nut against the inner sidewall of the panel joining member.

'701 discloses a connecting structure wherein a recess includes an aperture (2a, see Fig. 2(a)) to receive a nut (4, see Fig. 1) into which the fastening member can be screwed, the member and the nut co-operatively engaging to lock the nut against the inner wall.

'765 and '701 are analogous art because they are from the same field of attaching external members into channels via fasteners engaging the channel and member.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the member of '765 so as to use the nut of '701.

The motivation to combine would have been to provide for a more secure connection between the screw and the internal components of the channel to ensure against the dislocation of the screw in the event of a breakdown in the wall of the channel.

***Response to Arguments***

14. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENT W. HERRING whose telephone number is (571)270-3661. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571)272-6777. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. W. H./
Examiner, Art Unit 3633

/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635